

What is claimed is:

1. A polymer blend comprising:
a coherent phase made from an aliphatic and/or semiaromatic (co)polyamide and, dispersed therein,
a phase made from an olefinic polymer, wherein the olefinic polymer is an olefin block copolymer grafted with intramolecular carboxylic anhydrides.
2. A polymer blend as claimed in claim 1, wherein said coherent phase is present in an amount from 50 to 95% by weight, based on the total weight of the polymer blend.
3. A polymer blend as claimed in claim 1, wherein the coherent phase comprises an aliphatic (co)polyamide, a mixture of two or more aliphatic (co)polyamides, or a mixture of at least one aliphatic (co)polyamide with at least one semiaromatic (co)polyamide.
4. A polymer blend as claimed in claim 1, wherein the molar mass M_n of the (co)polyamide is from about 20,000 to 40,000 g/mol.
5. A polymer blend as claimed in claim 1, wherein the olefin block copolymer comprises PP blocks and/or EPM blocks.
6. A polymer blend as claimed in claim 1, wherein the olefin block copolymer comprises at least one selected from the group consisting of PP blocks, EPM blocks, and EBM blocks.
7. A polymer blend as claimed in claim 1, wherein the proportion of graft groups is from 0.3 to 0.8% by weight, based on the weight of the olefin block copolymer.
8. A polymer blend as claimed in claim 1, wherein the olefin block copolymer has been grafted with an anhydride of an unsaturated, aliphatic di- or polycarboxylic acid.

9. A polymer blend as claimed in claim 8, wherein the unsaturated aliphatic di- or polycarboxylic anhydride comprises maleic anhydride, citraconic anhydride, or itaconic anhydride.

10. A polymer blend as claimed in claim 9, wherein the olefin block copolymer has been grafted with maleic anhydride in the presence of monomeric styrene and an organic peroxide.

11. A polymer blend as claimed in claim 10, wherein the molar ratio of monomeric styrene to maleic anhydride is in the range from 0.4 to 1.4.

12. A polymer blend as claimed in claim 1, wherein the aliphatic and/or semiaromatic (co)polyamide and the olefin block copolymer grafted with intramolecular carboxylic anhydrides have been reacted with one another, thereby forming covalent bonds.

13. A polymer blend as claimed in claim 1, wherein said phase made from an olefinic polymer comprises particles with a diameter d_p of from 0.2 to 5.0 μm .

14. A film having at least one layer comprising a polymer blend as claimed in claim 1.

15. A film as claimed in claim 14, which has been mono- or biaxially oriented.

16. A film as claimed in claim 14, which has been heat-set.

17. A sausage casing comprising a film as claimed in claim 14.